



3 PHASES
ENERGY SERVICES

Solar RECs and Project Funding

Prepared For:

**11th Annual National Renewable
Energy Marketing Conference**

San Francisco, CA





Who is 3 Phases Energy?

UTILITY PARTNERSHIPS

Utility Green Power
Program Design and
Management

GREEN CERTIFICATES

Retail and Wholesale
Sales of Green
Certificates

GREEN DIRECT

Direct Access
100% Renewable Retail
Electricity Sales

GREEN ONSITE & DEVELOPMENT

Renewable Generation
Daylight Savings PPA

Slide 2

KKC2

Thank god somebody finally updated this turkey.

Kevin Christy, 10/30/2006



Benefits of Solar RECs in Project Funding

- **Flexible:** Title can be transferred across customer classes, utility regions and geographic regions, and between voluntary and compliance markets, seeking their highest value
- **Promising:** In a world of increasing awareness of climate change, RECs could be a source of great value in a project
- **Worthy of Confidence:** Improved tracking measures and defined standards increase confidence in RECs by all constituents in the marketplace



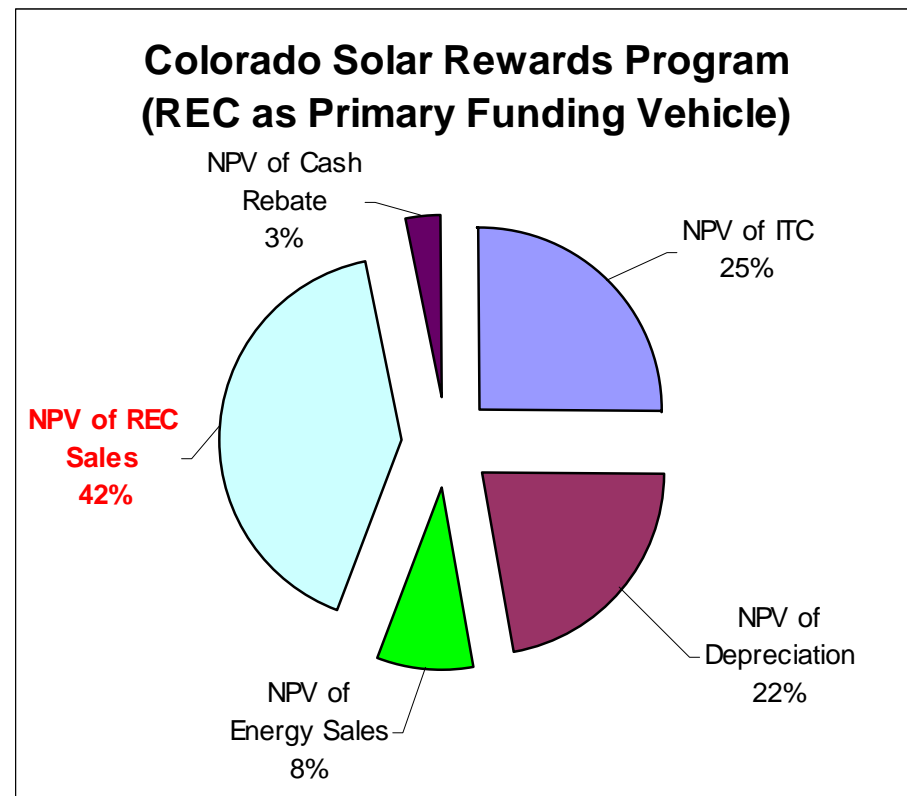
Solar RECs, REC Markets and Incentive Programs

- **Compliance Primary** (Captured in exchange for direct payment for the REC for compliance purposes)
 - Nevada
 - Colorado
- **Compliance Secondary** (Sold into compliance market apart from incentive program)
 - New Jersey
- **Compliance Indirect** (Captured in exchange for capacity/anticipated performance payment)
 - Oregon
 - LADWP
- **Voluntary** (Sold into voluntary markets)
 - CA



Solar RECs as Primary Financing Vehicle

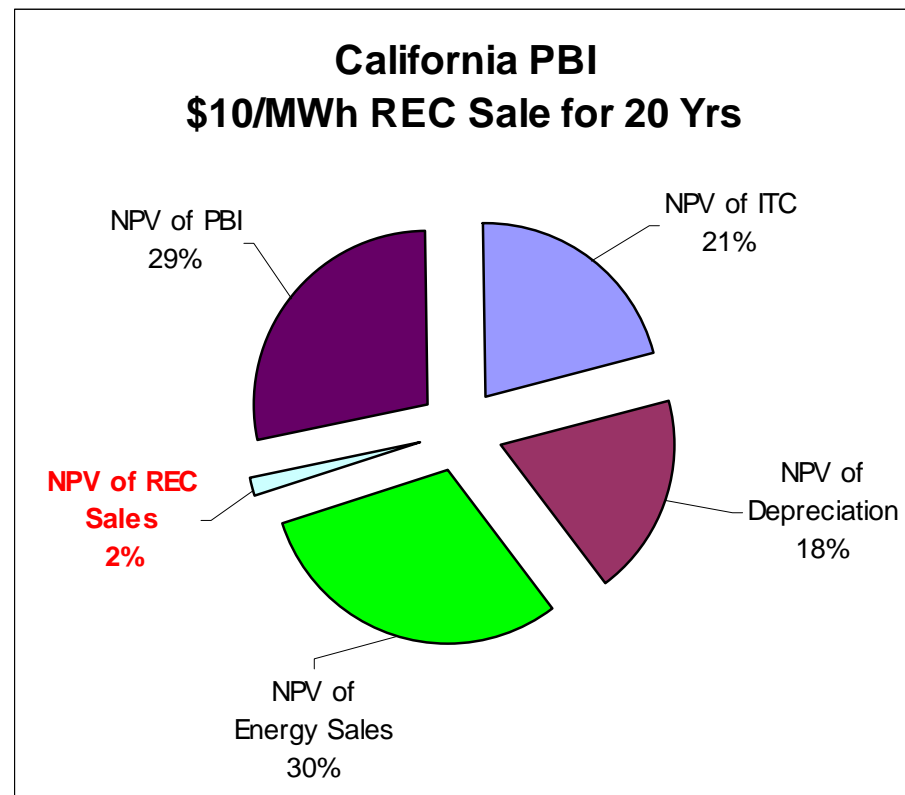
- 20-year SREC contract from Xcel
- SREC price is competitively bid
- Small additional rebate for Xcel customers
- Higher cash flow good for project finance





Solar REC as Secondary Funding Vehicle

- California PBI (2007)
- SREC price is \$10 for 20 years
- Very minor impact on NPV
- Can assist with maintaining debt service coverage ratios





Issues Relating to Using SRECs as Secondary Funding Vehicle

- **Contractual Issues (Non-compliance markets)**
 - Long term contracts hard to come by
 - Uncertainty about ownership
 - Uncertainty about compliance/voluntary market demand
 - Uncertainty about future market prices
 - Creditworthiness of offtaker can be a concern
 - Difficult to securitize
 - Transaction cost can exceed the benefit of transacting
- **Compliance Issues**
 - REC price ultimately capped at compliance penalty
 - High in NJ, low in WA
 - State PUC or legislature may change the game
- **Funding Offset Issues**
 - Incentive programs may consider SREC income as offsets (CA)



Dealing with Customers and SREC Ownership

- By nature, SREC title belongs to the system owner unless specifically transferred
- *Customers should always know who has title to the SRECs and for how long*
- Need to exercise care in making claims
- Potential impact on corporate credibility
- Potential impact on carbon accounting
- *Lost SRECs can be replaced by other sources to maintain offset levels*



Things to Watch Out For

- Giving away RECs “on the cheap” for compliance
 - The primary point of an RPS is to build new renewables—not to reach accounting goals
- Treating RECs as offset income to incentives
- REC compliance penalties that are too low to support solar project development (Washington)
- REC transfers as a condition of net metering or interconnection
- Inappropriate green energy claims by customers and system resellers



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Questions?

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